STCG SUBCON SUBGROUP MEETING MINUTES

February 6, 1997

Advanced Characterization Approach

A proposal entitled "Advanced Characterization Approach for Buried Waste Sites at Hanford" was approved without discussion. Kim Koegler (BHI) presented the proposal at the January meeting, and the Subgroup members reviewed the write-up offline.

Subsurface Heavy Metal Detection System

A proposal entitled "Subsurface Heavy Metal Detection System to Enhance Remedial Action Design" was presented by Clarence Corriveau of BHI. The system will be deployed in the 300 Area with the cone penetrometer to detect subsurface uranium. BHI wants to extend the demonstration to the 100 Area to detect chromium and lead in soils, which will require an additional $65K. The specific demonstration site will be selected in conjunction with EPA and Ecology project managers. No problems are expected in near-surface (0-20 feet) applications. The system uses laser-induced breakdown spectroscopy to provide in situ, real-time, semi-quantitative analysis of heavy metals in soils. It is considered to be a guidance tool for the project manager to delineate the boundaries of a contaminated area fairly quickly. There will be potential savings if the extent of contamination is better defined (e.g., waste volumes, locations). The tool can be deployed while remediation is being done.

Dib Goswami (Ecology) mentioned that this technique is well known for chlorinated solvents. Hanford is trying to prove that it works for chromium and lead. The new aspect of the demonstration is using the cone penetrometer with fiber optics to get the data back up to the truck in real time. Getting reliable data back through the fiber optic cable without interference is the main challenge. The contractor plans to do 20-30 pushes of the cone in a week with continuous logging.

Dib stated that this is a good technology that is cheaper and faster than the baseline. Ecology endorses the proposal and wants to move forward with site selection. Stan Sobczyk (Nez Perce Tribe) stated that a goal of the Nez Perce is to get DOE to do vadose zone characterization, and this proposal aligns well with that goal, so they endorse it.

In Situ Redox Manipulation Peer Review Report

Dave Biancosino (DOE) and John Fruchter (PNNL) provided an overview of the ASME peer review of the in situ redox manipulation technology that took place at Hanford on February 4-5, 1997. ASME concluded that the treatability test should proceed. The Nez Perce Tribe concurred with the way the peer review was handled and stated that their concerns were addressed. If you wish to see ASME's final report, please contact Dave at (509) 372-4012.

Electrokinetics Proposal

Kim Koegler stated that it was determined by BHI that the electrokinetics technology is not a viable option for remediation for the 1301N and 1325L LWDFs. While the technology was determined to be implementable, the estimated cost of remediation by electrokinetics is greater than the baseline cost. The current baseline is to excavate and dispose at ERDF. Dib Goswami felt that electrokinetics should have wide applicability in the 200 Areas. This is one of the technologies he is promoting in his ITRC Committee on Emerging Technologies. Stan Sobczyk asked if the technology would work beneath the tanks. Donna Wanek (DOE) said yes, and also under the canyon facilities. Dib volunteered to bring information to the next meeting on what is happening with this technology in other parts of the country.

January STCG Management Council Meeting

Donna Wanek provided an overview of the last STCG Management Council meeting, which consisted of a working/learning session on self-assessment. The Management Council wants to focus their discussions on big issues, so proposals from the Subgroups will probably be reviewed and comments provided offline rather than requiring formal presentations. Also, the EM-50 Focus Areas will likely be presenting their programs/priorities to the Subgroups rather than the Management Council. The Subgroups can raise any significant issues or concerns to the Management Council for resolution.

FY98 Budget for the Subcon Focus Area

Dave Biancosino noted that the FY98 budget for the Subcon Focus Area will be much less than the $45M they have for FY97. They may get as much as a 60% budget cut, which would mean that there will not be a FY98 call for proposals. They will likely prioritize ongoing work scopes to decide which ones to continue. In situ redox manipulation will probably continue since the ASME peer review has already been conducted.

Future Subcon Subgroup Meetings

It was decided that Subcon Subgroup meetings will be held on the fourth Wednesday of each month. The next meeting will be held on February 26, and it will be a relatively short meeting. Topics for that meeting are:

- Proposal on Smart Sampling Process (Kim Koegler)
- EM-50's Technology Deployment Initiative (Dave Biancosino)
- Needs and Uses of Barriers for Waste Management (Brian Foley)

Attendees

Dave Biancosino (DOE)

Clarence Corriveau (BHI)

Linda Fassbender (PNNL)

John Fruchter (PNNL)

Glen Goldberg (DOE)

Dib Goswami (Ecology)

Kim Koegler (BHI)

Wayne Martin (PNNL)

Bob McLeod (DOE)

Mike Schlender (PNNL/ERC)

Fred Serier (DOE)

Stan Sobczyk (Nez Perce Tribe ERWM)

Donna Wanek (DOE)